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<div>27752 7590 12/12/2007</div> <div>THE PROCTER & GAMBLE COMPANY</div> <div>INTELLECTUAL PROPERTY DIVISION - WEST BLDG.</div> <div>WINTON HILL BUSINESS CENTER - BOX 412</div> <div>6250 CENTER HILL AVENUE</div> <div>CINCINNATI, OH 45224</div>				
			EXAMINER	
			FORTUNA, JOSE A	
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The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/676,397
Filing Date: October 01, 2003
Appellant(s): REHDERS ET AL.

**MAILED
DEC 12 2007
GROUP 1700**

Peter T Nguyen
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed August 29, 2007 appealing from the Office action mailed June 22, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-6 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinheimer et al., US Patent No. 5,810,972.

Reinheimer et al. teach a multiply tissue in which at least one of the plies contains a hemicellulose additive, see abstract. In column 4, lines 12-26, Reinheimer et al. teach that one of the preferred hemicellulose is Xylan and in the same lines they teach the refining and the same pulp as claimed. Reinheimer et al. teach also that cationic additives can be used to fix the xylan, see column 7, lines 51-62. The only difference between the claimed invention and the one disclosed by the reference is that Reinheimer et al. suggest a different addition range, i.e., from 0.15 to 1.5% based in the weight of dry cellulose fibers. However, the claimed upper range falls within the acceptable error limit of the reference lower range. Moreover, it has been held that “[T]he discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art.” *In re Antoine*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); *In re Aller*, 42 CCPA 824, 220 F.2d 454, 105 USPQ 233 (1995). Note that one of ordinary skill in the art would have reasonable expectation of success 0.1% is used instead of 0.15%, since Reinheimer et al. do not discourage routine experimentation to discover the entire workable range, i.e. no negative statement is disclosed in regard to the range.

Reinheimer et al. teach a multiply tissue in which at least one of the plies contains a hemicellulose additive, see abstract. In column 4, lines 12-26, Reinheimer et al. teach that one of the preferred hemicellulose is Xylan and in the same lines they teach the refining and the same pulp as claimed. Reinheimer et al. teach also that cationic additives can be used to fix the xylan, see column 7, lines 51-62. Even though Reinheimer et al. teach that when xylan is used as a sole hemicellulose component, the addition amount is outside the claimed range. However, it appears that the amount of xylan is within the claimed range

when added as highly milled pulp, i.e., birch pulp, since they teach the same type of xylan containing pulps, highly refined Birch pulp and at the same range as claimed, see for example claims 10 and 11 of Reinheimer et al. Claims 4-6 of the present invention evidence that the xylan content of the birch pulp of Reinheimer et al. is within the claimed range, because they are the same pulps and they are added at overlapping ranges. Reinheimer et al. teach that the highly milled pulp has the Schopper-Riegler slowness value of at least 80°SR that covers, approximately to Canadian freeness of less than 100, around 50¹.

Note that the claims are open to other components, i.e., by virtue of the use of the transitional phrase “comprising,” and therefore, the use of the birch pulp reads on the claims as claimed.

As to the use of biasing agent of claims 7-8, Reinheimer et al. teach the use of cationic agents to fix the hemicellulose on/onto the fibers, see column 4, lines 34-39.

Therefore, Reinheimer et al. seems to teach all the elements of the claims or at least the minor modification(s) to obtain the claimed invention would have been obvious to one of ordinary skill in the art.

(10) Response to Argument

Applicant's arguments filed on August 29, 2007 have been fully considered but they are not persuasive.

Applicants argue that the amount of xylan of the cited reference is above the upper limit of the current application and that the reference contains no teaching, suggestion, or motivation

¹ Conversion table of <http://www.finebar.com/resourcecenter/freeness.html> was used.

to one of ordinary skill in the art to use a low amount of xylan as is currently claimed. The arguments are not convincing for the following reasons:

- a) As explained in previous actions, applicants have not shown that the tissue is different than the one disclosed by the reference. It is important to note that the claimed amount of xylan is not the amount of xylan of the tissue, but what it is added to the furnish, and as it well known, none of the process are capable of retaining 100% of the additives and/or raw materials. That is, the amount of added xylan is a process step rather than a property of the tissue and applicants have not shown any evidence that the final product is different than the one of the cited reference. The properties of the final product would depend on the amount of the additives retained with the fibers and not on the amount added to the furnish, i.e., if the degree of retention is greater in a process than in other, for the same amount of additive in the final product, the process of the greater retention needs less of the initial additive than the ones with less retention. For this particular case it needs to be assumed, in view of the lack of evidence of the difference between the final product, that the retention of the additive in the final product is greater in the application than in the cited reference, but the final products are the same. As explained above, the characteristic of the product has been defined by the process step of the addition of the additive(s) to the furnish. In the event any differences can be shown for the product -by-process claims 1-6 and 17-18 as opposed to the product taught by the reference Reinheimer et al. such differences would have been obvious to one of ordinary skill in the art as routine modification of the

product in the absence of a showing unexpected results, see *In re Thorpe*, 227 USPQ 964 (CAFC 1985). As the afore mentioned claims are product by process claims, it is deemed that "[A]ny difference imparted by the product by process claims would have been obvious to one having ordinary skill in the art at the time the invention was made because where the examiner has found a substantially similar product as in the applied prior art the burden of proof is shifted to the applicants to establish that their product is patentably distinct, ..." *In re Brown*, 173 U.S.P.Q. 685, and *In re Fessmann*, 180 U.S.P.Q. 324. Further, "[P]rocess limitations are significant only to the extent that they distinguish the claimed product over the prior art product." *In re Luck*, 177 U.S.P.Q. 523 (1973).

- b) Even if applicants could prove that the amount of xylan is the amount of xylan in the final product, which based in the teachings of the specification, it is not, it is the examiner's contention that the upper range claimed and the lower range of the cited reference would not amount to a patentable different final product. Note that in papermaking the additions of additives are not controlled to be so accurate and the difference between 01% and 0.25% would be within acceptable range. Note also that calculations made by applicants are based in the amount of xylan in the wood, and does not take in consideration any loss in xylan in the pulping process.
- c) With respect to the arguments that there is no motivation to combine, current court decision, *KSR*, forecloses the arguments that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See

recent Board decision *Ex parte Smith*, --USPQ2d--, slip op. at 20, (Bd. Pat. App.
& Interf. June 25, 2007) (Citing KSR, 82 USPQ2d at 1396).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related
Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/José A. Fortuna/
Primary patent Examiner
AU: 1791

Conferees:

 FOR STEVE GRIFFIN
Steven Griffin

/Romulo H. Delmendo/

Romulo Delmendo, Appeal Conferee